PTO/SB/21 (05-03) Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. **Application Number** 10/785,653 **TRANSMITTAL** Filing Date February 23, 2004 **FORM** First Named Inventor Jack G. Bitterly Art Unit (to be used for all correspondence after initial filing) **Examiner Name** Attorney Docket Number

361

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Signature

Linda Massey

		ENCLOSURES (Check all that apply,)
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Date	June 15, 2004		
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650004.15203

Date

June 15, 2004

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Sheet 2

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/785,653			
Filing Date	02/23/04			
First Named Inventor	Jack G. Bitterly			
Art Unit				
Examiner Name				
Attorney Docket Number	650004.15203			

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2 (# known)}	0/4074	T'4	- I igui co / ippodi
		^{US-} 3,797,662 A	3/1974	Titus	
		^{US-} 3,890,205 A	6/1975	Schnitzer	
		^{US-} 3,915,673 A	10/1975	Tamai et al.	
		^{US-} 4,030,897 A	6/1977	Pelzer et al.	
		^{US-} 4,052,303 A	10/1977	Hultsch et al.	
		^{US-} 4,249,083 A	2/1981	Bitterly	
		^{US-} 4,451,334 A	5/1984	Ciocca et al.	
		^{US-} 4,586,985 A	5/1986	Ciocca et al.	
		^{US-} 4,863,567 A	9/1989	Raley	
		^{US-} 5,409,576 A	4/1995	Tleimat	
		^{US-} 5,411,640 A	5/1995	Ramsland	
		^{US-} 6,123,655	9/2000	Fell	
		^{US-} 6,238,524 B1	5/2001	Zebuhr	
		^{US-} 6,258,215 B1	7/2001	Samsonov et al.	
		^{US-} 6,261,419 B1	7/2001	Zebuhr	
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	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages			
		Country Code ³ -Number ⁴ -Kind Code ⁵ (<i>if known</i>)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶		
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bobstitute for form 1449/PTO		Complete if Known			
	Application Number	10/785,653			
INFORMATION DISCLOSUR	E Filing Date	February 23, 2004			
STATEMENT BY APPLICAN	First Named Inventor	Bitterly, Jack			
	Art Unit				
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Sheet 3 of 3	Attorney Docket Number	650003.15203			

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²		
	*	Waste Management Program, Final Report. NASA REPORT No. 25,158. Final report of technical results on contract NAS 9-1680, 1965.			
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			Application Number	10/785,653		
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	_		First Named Inventor	Jack G. Bitterly		
		APPLICANT	Art Unit			
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eet 1	of	3	Attorney Docket Number	650004.15203		

11 Sheet

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 1,350,009 A	8/1920	Del Valle	
		^{US-} 2,169,601 A	8/1939	Cornelius et al.	
		^{US-} 2,199,848 A	5/1940	Bryson	
		^{US-} 2,199,849 A	5/1940	Bryson	
		^{US-} 2,210,928 A	8/1940	Hickman	
		^{US-} 2,349,431 A	5/1944	Hickman	
		^{US-} 2,474,006 A	6/1949	Maycock	
		^{US-} 2,765,979 A	10/1956	Boestad et al.	
		^{US-} 2,894,879 A	7/1959	Hickman	
		^{US-} 2,924,292 A	2/1960	Hickman	
		^{US-} 3,136,707 A	6/1964	Hickman	
		^{US-} 3,200,050 A	8/1965	Hogan et al.	
		^{US-} 3,271,271 A	9/1966	Watt	
		^{US-} 3,396,088 A	8/1968	Bechard	
		^{US-} 3,486,984 A	12/1969	Sperry	
		^{US-} 3,559,879 A	2/1971	Bechard et al.	
		^{US-} 3,595,298 A	7/1971	Berkeley, III	
		^{US-} 3,717,554 A	2/1973	Ruthrof	
		^{US-} 3,788,954 A	1/1974	Cantrell	

FOREIGN PATENT DOCUMENTS						
Examiner Cite	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages		
		Country Code ^{3 -} Number ^{4 -} Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	
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